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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/780,005
Filing Date: February 17, 2004
Appellant(s): SIMONUTTI ET AL.

Terrence P. O'Brien
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/23/08 appealing from the Office action mailed 3/27/08.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

NEW GROUND(S) OF REJECTION

Though the examiner is in disagreement with the decision rendered by the BPAI regarding a new grounds of rejection with respect to claim 33 and 34, the examiner will note claims 33 and 34 as having a new grounds of rejection in which the Sullivan et al. USPN 5984806 reference was removed from the heading. A close look at the office action dated 3/27/08 would show that Sullivan '806 was never explained or relied upon

for its content in the body of the rejection regarding claims 33 and 34 and therefore removed to simplify issues.

Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) and Yamada et al. (USPN 5585440) further in view of Yamagishi et al. (USPN 5779563).

In regards to claims 33 and 34, the combination above does not disclose the core, intermediate layer, and cover layer having approximately the same specific gravity. Yamagishi et al. discloses a golf ball having a core **1**, intermediate layer **2**, and cover **3** having approximately the same specific gravity (See Column 2, lines 64 and 65; Paragraph bridging Columns 3 and 4; and Column 4 lines 28 through 33). For instance, the core has a specific gravity of 1.02 to 1.18, the inner cover has a specific gravity of 0.9 to 1.2, and the outer cover has a specific gravity of 1.10 to 1.25, where in the outer cover has a difference in specific gravity from the core of 0.01 to 0.15. The disclosure of Yamagishi only requires that the outer cover be larger in specific gravity than the core and inner cover and be larger than the specific gravity of the core by a particular amount, therefore specific gravities of the core, inner cover, and outer cover can be 1.12, 1.125, and 1.130, respectively. The specific gravities as noted above would be within the bound of Yamagishi et al. and being that such would be the case, one having ordinary skill in the art would have found it obvious to have the core, intermediate layer, and cover layer having approximately the same specific gravity, as taught by Yamagishi et al., in order to improve the golf ball's distance, controllability, roll, and straight travel.

Claim 58 has been noted as having a new ground of rejection being it was not shown as to what is readable on the limitation.

Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) and Yamada et al. (USPN 5585440).

In regards to claim 58, Sullivan et al. in view of Statz et al. does not disclose neodymium as a catalyst. Yamada et al. discloses a rubber composition for use as a golf ball core wherein the composition comprises a high-cis (more than 40%) content polybutadiene rubber wherein the rubber is synthesized with a neodymium catalyst (See Summary of the invention). One having ordinary skill in the art would have found it obvious to have the core comprise of a high-cis polybutadiene catalyzed with neodymium, as taught by Yamada et al., in order to improve the workability, processability, and impact resilience of the golf ball. It is submitted that the being that the combination would result in a golf ball of the same structure as that of the applicant, the initial velocity off the clubhead of greater than about 240 feet- per-second and the COR are inherently met.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5779561	Sullivan et al.	07-1998
6815480	Statz et al.	11-2004
5779563	Yamagishi et al.	07-1998
5585440	Yamada et al.	12-1996
5984806	Sullivan et al.	11-1999

Caschera, Jr., Louis G., "The Legal Golf Ball," Strictly Golf Balls. Michigan: Strictly Golf, Inc., copyright 1998, pages 16 and 17.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, 8, 18, 19, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480).

In regards to claims 1, 2, and 8, Sullivan et al. '561 discloses a golf ball comprising a solid center **10** having a deflection, under an applied static load of 200 lb., of between about 0.100 inches and about 0.140 inches, equivalent to a PGA

compression of 60 to 100; at least one intermediate layer **14** comprised of thermoplastic material; and a cover layer **16** comprising an ionomer or ionomer blend and having a Shore D hardness, measured on the curved surface of the golf ball, of greater than about 60 (See Summary of the invention, Column 7, lines 21 through 23; Paragraph bridging columns 10 and 11; and paragraph bridging columns 13 and 14 and Figure 1). Sullivan et al. '561 notes that the intermediate layer may contain an ionomer, but does not disclose the type of ionomer. Statz et al. discloses a thermoplastic composition comprising a co- or ter- polymer of ethylene and acrylic acid wherein 100% of the acid groups are neutralized with metal ions and including a level of magnesium oleate. Statz et al. notes that the composition results in increased resilience. Further, Statz et al. notes that the composition can be used in any component of the golf ball. Therefore, one having ordinary skill in the art would have found it obvious to incorporate magnesium oleate to a co- or ter- polymer in which the acid groups are 100% neutralized, as taught by Statz et al., in order to increase the resilience of the golf ball. It is submitted that the being that the combination would result in a golf ball of the same structure as that of the applicant, the initial velocity off the clubhead of greater than about 240 feet- per-second and the COR are inherently met.

In regards to claim 5, Sullivan et al. '516 discloses the at least one intermediate layers having a Shore D hardness as measured on the curved outer surface of the at least one intermediate layer of less than 65.

In regards to claims 18 and 19, Sullivan et al. '561 discloses the mantle **14** comprising density increasing fillers such as tungsten (See Columns 8 and 9).

In regards to claim 57, Statz et al. discloses the amount of cation being of an amount sufficient to neutralize the acid group 100%. Though the values are not explicitly recited, the amount of action has to be of a value such that the neutralization is 100%. One having ordinary skill in the art would have found it obvious to have any amount of cation so long as the composition is 100% neutralized.

Claims 28-30, 32, 41,42, 58, 59, 62-64, 67, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) and Yamada et al. (USPN 5585440).

In regards to claim 28, 29, 58, 67, and 68, Sullivan et al. '561 discloses a golf ball comprising a solid center **10** having a deflection, under an applied static load of 200 lb., of between about 0.100 inches and about 0.140 inches, equivalent to a PGA compression of 60 to 100; at least one intermediate layer **14** comprised of thermoplastic material; and a cover layer **16** comprising an ionomer or ionomer blend and having a Shore D hardness, measured on the curved surface of the golf ball, of greater than about 60 (See Summary of the invention; Column 7, lines 21 through 23; Paragraph bridging columns 10 and 11; and paragraph bridging columns 13 and 14 and Figure 1). Sullivan et al. '561 notes that the intermediate layer may contain an ionomer, but does not disclose the type of ionomer. Statz et al. discloses a thermoplastic composition comprising a co- or ter- polymer of ethylene and acrylic acid wherein 100% of the acid groups are neutralized with metal ions and including a level of magnesium oleate. Statz et al. notes that the composition results in increased resilience. Further, Statz et al. notes that the composition can be used in any component of the golf ball. Therefore,

one having ordinary skill in the art would have found it obvious to incorporate magnesium oleate to a co- or ter- polymer in which the acid groups are 100% neutralized, as taught by Statz et al., in order to increase the resilience of the golf ball. Yamada et al. discloses a rubber composition for use as a golf ball core wherein the composition comprises a high-cis (more than 40%) content polybutadiene rubber wherein the rubber is synthesized with a neodymium catalyst (See Summary of the invention). One having ordinary skill in the art would have found it obvious to have the core comprise of a high-cis polybutadiene catalyzed with neodymium, as taught by Yamada et al., in order to improve the workability, processability, and impact resilience of the golf ball. It is submitted that the being that the combination would result in a golf ball of the same structure as that of the applicant, the initial velocity off the clubhead of greater than about 240 feet- per-second and the COR are inherently met.

In regards to claims 30 and 64, Yamada et al. discloses the polybutadiene comprising a high cis-1,4 content polybutadiene and the core further comprising about 5 to about 60 parts by weight of a co-crosslinking agent comprised primarily of a zinc salt of an unsaturated acrylate, about 5 to about 60 parts by weight of a metal oxide activator, and about 0.1 to about 10 parts per hundred resin of a free radical initiator (See Columns 3 through 5).

In regards to claim 32, Statz et al. discloses the thermoplastic material comprising about 8-20% acrylic acid and about 11-23% n-butyl acrylate (See Columns 6 and 7). Typical composition top out at 100%. Being that this is the case and though not

explicitly recited by Statz et al., the weight percent of the ethylene component of the material encompasses the range of that claimed by the applicant.

In regards to claims 41 and 42, Sullivan et al. '561 discloses the mantle **14** comprising density increasing fillers such as tungsten (See Columns 8 and 9). Further, Statz et al. notes that density increasing filler such as tungsten can be combined with the composition.

In regards to claim 59, Yamada et al. discloses the polybutadiene comprising a high cis-1,4 content polybutadiene and the core further comprising about 5 to about 60 parts by weight of a co-crosslinking agent comprised primarily of a zinc salt of an unsaturated acrylate, about 5 to about 60 parts by weight of a metal oxide activator, and about 0.1 to about 10 parts per hundred resin of a free radical initiator (See Columns 3 through 5).

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view Statz et al. (USPN 6815480) further in view of Yamagishi et al. (USPN 5779563).

In regards to claim 11, the combination above does not disclose the core, intermediate layer, and cover layer having approximately the same specific gravity. Yamagishi et al. discloses a golf ball having a core **1**, intermediate layer **2** and cover **3** having approximately the same specific gravity (See Column 2, lines 64 and 65; Paragraph bridging Columns 3 and 4; and Column 4 lines 28 through 33). On having ordinary skill in the art would have found it obvious to have the core, intermediate layer, and cover layer having approximately the same specific gravity, as taught by Yamagishi

et al., in order to improve the golf balls distance, controllability, roll and straight travel. In regards to the solution, it is submitted that the combination would perform such act, being that the limitation requires testing in which the applicant is aware the office has no means of doing.

In regards to claim 12, Yamagishi et al. discloses the specific gravity between the core, intermediate layer, and cover being 1.02 to 1.18, 1.10-1.25, and 0.9 to 1.2 respectively, wherein the cover is greater than the core by at least 0.01 (See Column 2, lines 64 and 65; Paragraph bridging Columns 3 and 4; and Column 4, lines 28 through 33).

Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) and Yamada et al. (USPN 5585440) further in view of Yamagishi et al. (USPN 5779563).

In regards to claims 33 and 34, the combination above does not disclose the core, intermediate layer, and cover layer having approximately the same specific gravity. Yamagishi et al. discloses a golf ball having a core 1, intermediate layer 2, and cover 3 having approximately the same specific gravity (See Column 2, lines 64 and 65; Paragraph bridging Columns 3 and 4; and Column 4 lines 28 through 33). For instance, the core has a specific gravity of 1.02 to 1.18, the inner cover has a specific gravity of 0.9 to 1.2, and the outer cover has a specific gravity of 1.10 to 1.25, where in the outer cover has a difference in specific gravity from the core of 0.01 to 0.15. The disclosure of Yamagishi only requires that the outer cover be larger in specific gravity than the core and inner cover and be larger than the specific gravity of the core by a particular

amount, therefore specific gravities of the core, inner cover, and outer cover can be 1.12, 1.125, and 1.130, respectively. The specific gravities as noted above would be within the bound of Yamagishi et al. and being that such would be the case, one having ordinary skill in the art would have found it obvious to have the core, intermediate layer, and cover layer having approximately the same specific gravity, as taught by Yamagishi et al., in order to improve the golf ball's distance, controllability, roll, and straight travel.

Claims 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) further in view of Caschera, Jr. (Strictly Golf Balls).

Regarding claims 10 and 13, Sullivan et al. in view of Statz et al. does not disclose the diameter of the golf ball being less than 1.680 inches. Caschera et al. discloses the USGA requirement for the diameter to be 1.680 inches and notes that a smaller ball would result in increase distance. With the above being said, one having ordinary skill in the art would have found it obvious to reduce the diameter, as taught by Caschera, Jr., in order to increase distance.

Claim 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) and Yamagishi et al. (USPN 558440) further in view of Caschera, Jr. (Strictly Golf Balls).

Regarding claims 36 and 37, Sullivan et al. in view of Statz et al. does not disclose the diameter of the golf ball being less than 1.680 inches. Caschera et al. discloses the USGA requirement for the diameter to be 1.680 inches and notes that a smaller ball would result in increase distance. With the above being said, one having

ordinary skill in the art would have found it obvious to reduce the diameter, as taught by Caschera, Jr., in order to increase distance.

Claims 60 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) further in view of Caschera, Jr. (Strictly Golf Balls).

Regarding claims 60 and 61, Sullivan et al. in view of Statz et al. does not disclose the weight of the golf ball being 47 to 48 grams. Caschera, Jr. discloses the benefits of having a golf ball of particular weight wherein it is noted that the USGA require the golf ball can be no less than 1.62 ounces in which would result in increased distance, however it is noted that a smaller ball would result in increased distance (See Page 16). Based on the information above, one having ordinary skill in the art would have found it obvious to increase the weight of the golf ball, as taught by Caschera, Jr., in order to increase the flight distance of the golf ball.

Claims 65 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 5779561) in view of Statz et al. (USPN 6815480) and Yamada et al. (USPN 5585440) further in view of Caschera, Jr. (Strictly Golf Ball).

Regarding claims 65 and 66, Sullivan et al. in view of Statz et al. and Yamada et al. does not disclose the weight of the golf ball being 47 to 48 grams. Caschera, Jr. discloses the benefits of having a golf ball of particular weight wherein it is noted that the USGA require the golf ball can be no less than 1.62 ounces in which would result in increased distance, however it is noted that a smaller ball would result in increased distance (See Page 16). Based on the information above, one having ordinary skill in

the art would have found it obvious to increase the weight of the golf ball, as taught by Caschera, Jr., in order to increase the flight distance of the golf ball.

(10) Response to Argument

The appellant argues that **a)** claims 1, 2, 5, 8, 18, 19, and 57 are not unpatentable over Sullivan '561 in view of Statz et al., **b)** claims 28-30, 32, 41, 42, 59, 62-64, 67, and 68 are not unpatentable over Sullivan et al. in view of Statz et al. and Yamada et al., **c)** claims 11 and 12 are not unpatentable over Sullivan et al. in view of Statz et al. further in view of Yamagishi et al., **d)** claims 33 and 34 are not unpatentable over Sullivan '561 in view of Sullivan '806 and Yamada et al. further in view of Yamagishi et al. , **e)** claims 10 and 13 are not unpatentable over Sullivan in view of Statz et al. further in view of Caschera, Jr., **f)** claims 36 and 37 are not unpatentable over Sullivan in view of Statz et al. and Yamagishi et al. further in view of Caschera, Jr., **g)** claims 60 and 61 are not unpatentable over Sullivan in view of Statz et al. further in view Caschera, Jr., and **h)** Sullivan in view of Statz et al. and Yamada et al. in view of Caschera, Jr. The examiner disagrees.

With respect to issue **a)**, the appellant argues that Sullivan alone or in combination does not teach the cover layer having a Shore D hardness greater than about 70, the initial velocity of the golf ball, and the COR of the golf ball. MPEP 2123 notes that a rejection over prior arts broad disclosure instead of preferred embodiments is permissible. In addition, MPEP 2123 also notes that disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or non-preferred embodiment (See *In re Susi*, 169 USPQ 423). Sullivan discloses the

cover having a Shore D hardness of at least 60 wherein there is no upper limit to the hardness. Sullivan also notes the benefits of having a harder cover wherein Column 5, lines 20 through 36, notes that a harder cover has less spin than a softer cover. The comparative example shows a cover layer having a Shore D hardness of 68, i.e. about 70, in which shows that Sullivan is geared to the invention being met due to increase hardness. See MPEP 2144.05 in reference to the term "about", particularly *In re Geisler*, 43 USPQ2d 1362, 1365-66). The term "about" allows for the value to be lower or higher. The term "about" cannot be ignored. With respect to the initial velocity, this would result from the combination of materials. Sullivan in view of Statz et al. combined meet the requirements of the claims and would in a predictable result with respect to the initial velocity due to Statz et al. teaching the material having increased resilience. With respect to the COR, see the above regarding the initial velocity and the Shore D hardness. Sullivan notes that the golf ball has a COR of at least 0.750 (See Abstract). The COR disclosed by Sullivan has no upper limit.

The appellant also makes reference to the statement, "Further, the applicant is aware that the Office does not have the ability to test inventions, which is why the initial velocity is a part of the claim," made by the examiner in the final office action. The Patent Office does not have the ability to test the invention. The limitations directed to the initial velocity, and also the COR, are results of the combination of materials. The initial velocity is not the invention. The claims should distinguished from the prior art structurally not based on result. Hitting a ball at a higher speed does not equate to patentability if the prior art meets the structure of the claims. The statement merely

says that claiming the initial velocity does not distinguish the claims. The statement was not in the intent of trying to insult the appellant.

With respect to issue **b)**, see the above regarding issue **a**.

With respect to issue **c)**, see the above regarding issue **a**. In addition, appellant argues that Yamagishi et al. does not disclose the specific gravity about equal to each other. As noted above in the rejection, Yamagishi only requires that the outer cover be larger in specific gravity than the core and inner cover and be larger than the specific gravity of the core by at least 0.01, therefore specific gravities of the core, inner cover, and outer cover can be 1.12, 1.125, and 1.130, respectively theoretically. This is also within the broader range of the specific gravity of Yamagishi. Thus Yamagishi does not teach away from the claims.

With respect to issue **d)**, it should first be noted that the rejection should read Sullivan '561 in view of Statz et al. and Yamada et al. further in view of Yamagishi et al. This is evident from the dependency of 33 and 34 from claim 28. See the above regarding issues **a**, **b**, and **c**.

With respect to issue **e)**, Appellant argues that Caschera, Jr. does not provide motivation because Sullivan et al. teaches the diameter of the ball being at least 1.68 inches. Sullivan et al. does not hold to golf ball diameter to be at least 1.68. As noted in the paragraph bridging columns 6 and 7, Sullivan et al. uses the language, "The ball preferably has a diameter of at least 1.68 inches." The preferred embodiment does not restrict the prior art from being interpreted broader. As noted in the final rejection, Caschera, Jr. discloses the benefits of having a smaller diameters and larger diameters.

Sullivan et al. makes reference to the USGA with respect to the COR but does not specifically limit the golf ball to meeting USGA requirements. This is evident due to the use of the term “preferably” as noted above with the diameter of the golf ball. Based on the open disclosure of Sullivan et al., Caschera, Jr. provides adequate motivation.

With respect to issue **f**), Appellant argues the Caschera, Jr. teaches away from the weights of claims 60 and 61. Sullivan et al. discloses the weight of the golf ball only in the illustrative examples. Again, as set forth in MPEP 2123, the preferred embodiments do not limit the disclosure of the patent. Sullivan et al. does not limit the weight of the golf ball. As stated above in issue **e**, Sullivan et al. does not limit the golf ball to only USGA requirements; therefore, Caschera, Jr. provides adequate motivation.

With respect to issue **g**), see the above regarding issues **a**, **b**, **e**, and **f**.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Alvin A Hunter/

Examiner, Art Unit 3711

Conferees:

/Gene Kim/

Supervisory Patent Examiner, Art Unit 3711

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Art Unit: 3711

/XUAN M. THAI/

Supervisory Patent Examiner, Art Unit 3715